

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-3, 6, and 7 are pending in this application. Claims 1-3 and 6 are amended, Claims 4 and 5 are canceled without prejudice or disclaimer, and Claim 7 is added by the present amendment.

Amendments to the claims and new claims find support in the application as originally filed. Thus, no new matter is added.

In the outstanding Office Action dated January 8, 2009, Claims 1 and 6 were rejected under 35 U.S.C. § 102(b) as anticipated by Japanese Patent JP 08-217366 to Arakawa et al. (herein “Arakawa”); Claims 2 and 4 were rejected under 35 U.S.C. § 103(a) as unpatentable over Arakawa in view of Japanese Patent Publication 2004123279 to Araki (herein “Araki”); Claim 5 was rejected under 35 U.S.C. § 103(a) as unpatentable over Arakawa in view of Japanese Patent JP 08198538 to Nishigami et al. (herein “Nishigami”); and Claim 3 was indicated as allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Initially, Applicants gratefully acknowledge the indication of allowable subject matter in Claim 3. Furthermore, Applicants gratefully acknowledge the courtesy of an interview with Examiner Colon-Santana on February 4, 2009. During the interview, rejections in the Office Action and differences between the claimed invention and references in the Office Action were discussed. Comments and claim amendments discussed during the interview are reiterated below.

Amended Claim 1 is directed to an elevator rope slippage detecting device for detecting presence/absence of slippage between a rope that moves together with a car traveling in a hoistway, and a pulley around which the rope is wound and which is rotated

through movement of the rope. The device includes, in part, a pulley sensor configured to generate a signal in accordance with rotation of the pulley, and a car speed sensor configured to directly detect a speed of the car based on a frequency of an oscillating wave received from a reflecting surface on a side wall surface of the hoistway.

As discussed during the interview, the references in the Office Action fail to teach or suggest each of the features of the independent claims. For example, as discussed during the interview, Arakawa, Araki, and Nishigami fail to teach or suggest a car speed sensor configured to directly detect a speed of the car based on a frequency of an oscillating wave received from a reflecting surface on a side wall surface of the hoistway.

As discussed during the interview, Araki fails to disclose or otherwise suggest a car speed sensor configured to directly detect the speed of a car based on a frequency of an oscillating wave. Araki's Figure 1 shows a sensing device 60 that may use the Doppler effect to directly sense the speed of the cab. Furthermore, Araki indicates “[t]he sensing part 60a that is installed on the cab 7 supplies sensing signals 66a (including distance and speed signals) to the control panel 5.”¹ Furthermore, as shown in Araki's Figure 1, the sensing part 60a installed in the cab 7 may use the Doppler effect along dotted lines pointing straight up or straight down in the hoistway. However, as discussed during the interview, Araki fails to teach or suggest receiving an oscillating wave from a reflecting surface on a side wall surface of the hoistway. Furthermore, Nishigami and Arakawa also fail to teach or suggest the features lacking in the disclosure of Araki.

Therefore, as discussed during the interview, Arakawa, Araki, and Nishigami, whether taken individually or in combination, fail to teach or suggest “a car speed sensor configured to directly detect the speed of a car based on a frequency of an oscillating wave

¹ English translation of application CN 1486918A, which the Examiner asserted corresponds to Araki, at page 2, last paragraph.

received from a reflecting surface on a side wall surface of the hoistway," as recited in Claim 1 and as similarly recited in Claim 6.

Accordingly, it is respectfully requested the rejection of Claims 1 and 6 under 35 U.S.C. § 102(b) as anticipated by Arakawa be withdrawn.

In addition, Applicants respectfully traverse the rejection of Claims 2, 4, and 5 under 35 U.S.C. § 103(a) as unpatentable over Arakawa in view of Araki or Nishigami.

As discussed above, independent Claim 1 patentably defines over Arakawa, Araki, and Nishigami. Accordingly, Claim 2 also patentably defines over those cited references. Therefore, it is respectfully requested those rejections under 35 U.S.C. § 103(a) also be withdrawn.

Claim 7 is added to recite an elevator rope slippage detecting device that includes, in part, a pulley sensor configured to generate a signal in accordance with rotation of the pulley, a car speed sensor mounted at an end of the hoistway and configured to directly detect a speed of the car based on a frequency of an oscillating wave received from a reflecting surface on the car, and a processing device.

As discussed during the interview, the references in the Office Action fail to teach or suggest a car speed sensor mounted at an end of the hoistway and configured to directly detect a speed of the car based on a frequency of an oscillating wave received from a reflecting surface on the car.

Araki describes sensing device 60 including sensing part 60a that is installed on a cab 7 and supplies sensing signal 66a to a control panel 5. Thus, as discussed during the interview, Araki fails to teach or suggest a car speed sensor mounted at an end of the hoistway. Furthermore, Araki fails to teach or suggest detecting a speed of the car based on a wave received from a reflecting surface on the car. Applicants respectfully submit Arakawa and Nishigami also fail to teach or suggest these features. Accordingly, it is respectfully

submitted that the references in the Office Action fail to teach or suggest "a car speed sensor mounted at an end of the hoistway and configured to directly detect a speed of the car based on a frequency of an oscillating wave received from a reflecting surface on the car," as recited in independent Claim 7.

Accordingly, it is respectfully submitted that independent Claims 1, 6, and 7, and claims depending therefrom, are allowable.

Consequently, in light of the above discussion and in view of the present amendment this application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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